

63578
Feldspathic Fragmental Breccia
19.6 grams



Figure 1: Photo of 63578 after chipping. Ruler is in cm/mm. S72-55400.

Introduction

63578 is a rare sample from station 13, on the flank of North Ray Crater – see section on 63500. It is a fragmental breccia with at least some glass in the matrix.

Petrography

Warner et al. (1973) termed 63578 a “*slightly metamorphosed glassy breccia*”. Korotev (1996) dubbed it “*feldspathic fragmental breccia*”. There appears to be a lot of glass in the matrix (figure 2).

Chemistry

The composition of 63578 is reported in Korotev (1996). One wonders what Rhodes did with his split!

Radiogenic age dating

None

Other Studies

Pearce and Simonds (1974) determined the magnetic properties.

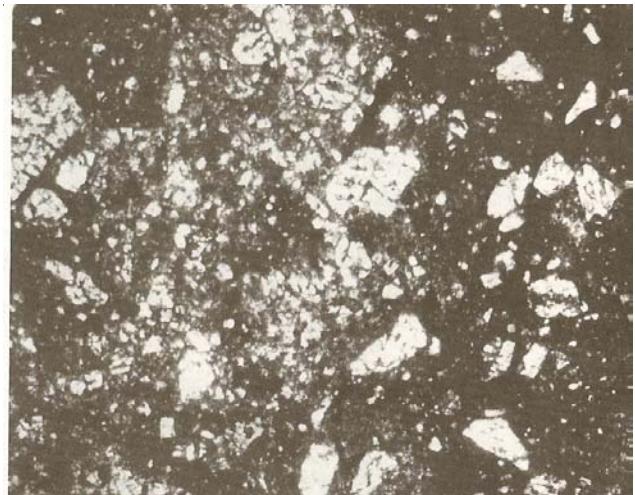
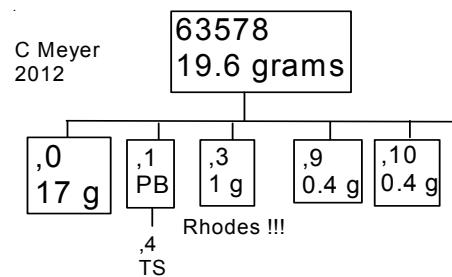


Figure 2: Thin section photo of 63578,4 with crossed polarizers. Width is about 3 mm.



*Figure 3: Photomicrograph of thin section 63578,4 by C Meyer.
2 mm across*

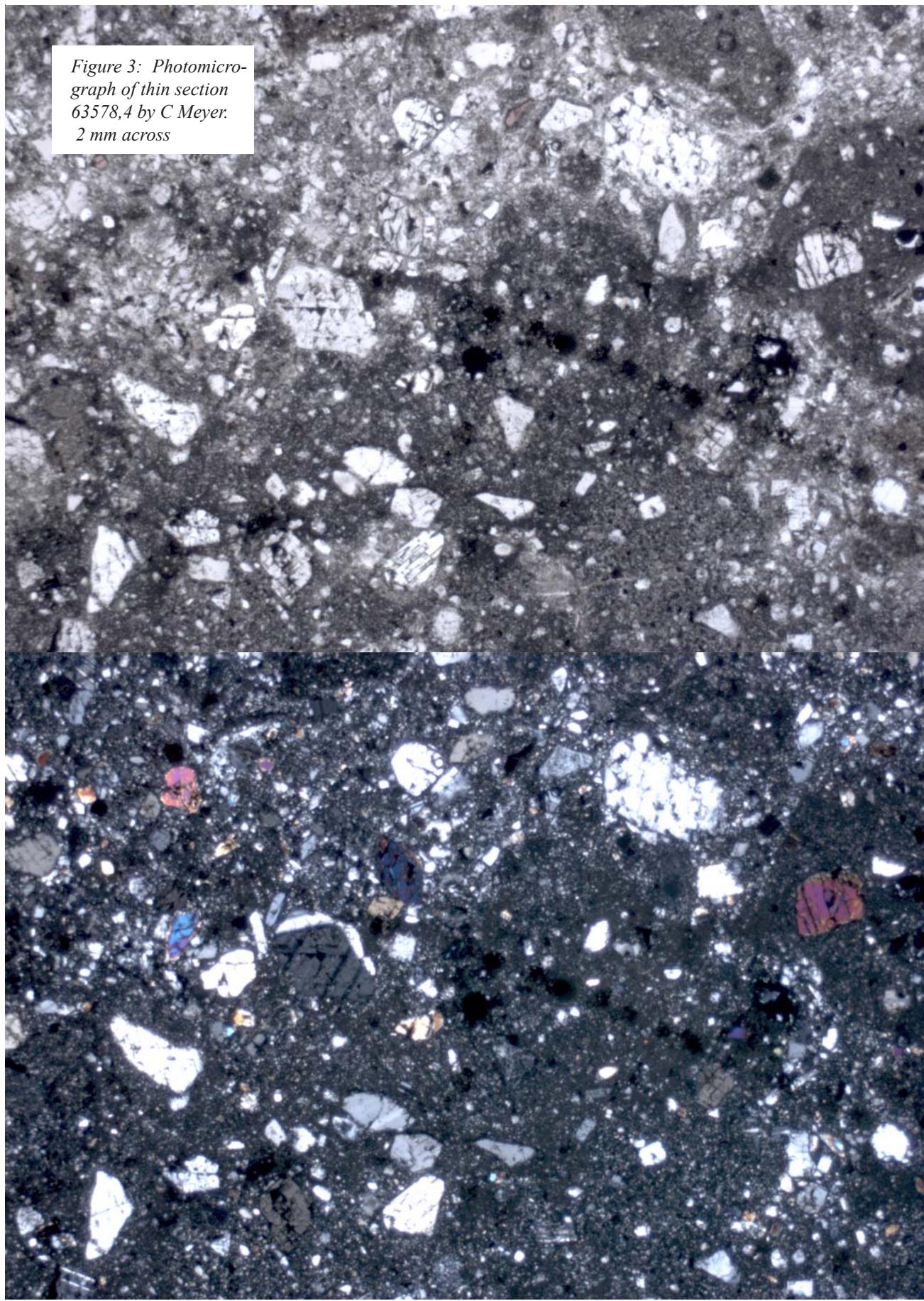


Table 1. Chemical composition of 63578.

reference	Korotov96	
weight		
SiO ₂ %		
TiO ₂		
Al ₂ O ₃		
FeO	4.65	(a)
MnO		
MgO		
CaO	14.6	(a)
Na ₂ O	0.46	(a)
K ₂ O		
P ₂ O ₅		
S %		
sum		
Sc ppm	6.4	(a)
V		
Cr	780	(a)
Co	23.5	(a)
Ni	258	(a)
Cu		
Zn		
Ga		
Ge ppb		
As		
Se		
Rb		
Sr	167	(a)
Y		
Zr	63	(a)
Nb		
Mo		
Ru		
Rh		
Pd ppb		
Ag ppb		
Cd ppb		
In ppb		
Sn ppb		
Sb ppb		
Te ppb		
Cs ppm		
Ba	72	(a)
La	4.36	(a)
Ce	11	(a)
Pr		
Nd		
Sm	1.86	(a)
Eu	0.95	(a)
Gd		
Tb	0.41	(a)
Dy		
Ho		
Er		
Tm		
Yb	1.9	(a)
Lu	0.264	(a)
Hf	1.58	(a)
Ta	0.26	(a)
W ppb		
Re ppb		
Os ppb		
Ir ppb	12.6	(a)
Pt ppb		
Au ppb	2.7	(a)
Th ppm	1.28	(a)
U ppm	0.34	(a)
technique:	(a) INAA	

References for 63578

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